

LANDSCAPE AND HERITAGE IN PRACTICE: 3 FOCUS AREAS

The first and simplest way for Dutch water authorities to incorporate historical landscapes and heritage values, is to consider them in practical implementation projects. The effectiveness of these projects can be improved through both regional collaboration and internal activities that are focused on landscape and heritage themes.

PROJECT IMPLEMENTATION | PROJECT TEAM

INITIATION PHASE AND PROJECT DEFINITION

- Take advantage of linking opportunities to landscape\heritage, search for partners Explicitly place landscape and heritage
- anchor landscape and heritage elements into the planning process

RESEARCH, VISION DEVELOPMENT & DESIG

- Include landscape and heritage elements as an integral part of the research and vision development process
- Make informed and transparent choices
 Utilize the connecting strength of the design

DEVELOPMENT AND REALIZATION

- 7 Ensure that the development plan is well aligned with the landscape, cultural- and historical aspects of the environmental pla
 8 Give the implementers clear instructions
- about the landscapes and heritage

 9 Include landscape and heritage within
- the management vision

IANAGEMENT AND MAINTENANCE

- 10 Make clear agreements with future managers regarding the relevant landscape and heritage features
- 11 Assess the possibilities of landscape and heritage management practices by farmers and residents.
- 12 Explicitly incorporate landscape and heritage themes into monitoring & evaluation

DEVELOPMENT OF VISION AND COOPERATION ON REGIONAL AND PROVINCIAL LEVELS | REGIONAL MANAGERS & POLICY MAKERS



- 2 Ensure that the landscape and cultural-historical knowledge is appealing and engaging at a regional or catchment level
- 3 Create spatial planning at a catchment level and ensure that the landscape and heritage values can be translated to sub-catchment levels
- 4 Utilize the interest for landscapes and heritage from new (public) initiatives

SUPPORT FROM WITHIN YOUR ORGANIZATIO

- 1 Water authorities should lead by example update or formulate internal policy regarding landscape and heritage
- 2 Invest in the development of expertise, knowledge exchange and commissioning projects
- 3 Invest in landscape- and historical knowledge and make this accessible to a wider audience
- Work together on the development of knowledge, policy and operation within and between the water authorities

INCORPORATING LANDSCAPE AND HERITAGE THEMES IN THE DESIGN: 11 GOLDEN RULES

Eleven specific focus points to implement landscape and heritage values in a development orientated manner, for water related projects.

- View stream valleys as an important spatial structure for the landscape
- Find the old edges of the stream valley and make them stand out from their surroundings
- Recognize the specifically unique historical and landscape qualities of streams and streams valleys and connect to this during the design process
- Respect and preserve the soil and topographic archives as a source of information of natural and historic streams
- Onsider the stream valley for the entire catchment area and make appropriate spatial choices
- Utilize and respect the different temporal changes observed across a stream landscape
- Recognize and utilize the historic-ecological values
- Onsider built heritage within the context of its related landscape
- Respect and utilize the spatial aspects of a stream systems in urban and built up areas
- Make historical stream landscapes visible and available for recreation and an enjoyable experience
- Recognize that stream restoration influences the landscape beyond the immediate project area



10 GOOD REASONS TO UTILIZE LANDSCAPE AND HERITAGE VALUES WITHIN WATER RELATED PROJECTS

For the Dutch water authorities the preservation of historical stream landscapes in the Netherlands is currently not a key focus point. They are primarily required to provide sufficient, clean and safe water. Nevertheless, there are numerous reasons to incorporate landscape and heritage aspects. In the coming years many stream landscapes will undergo restoration, which provides opportunities to utilize landscapes and heritage as a source of inspiration, a stimulus to boost quality and link to related issues.

10 good reasons to incorporate landscapes and heritage in water related projects:

- 1 Landscape and heritage elements can strengthen the quality and uniqueness of water projects
- 2 Landscape heritage offers inspiration and a starting point for current water objectives
- 3 Attractive landscapes together with a strong regional identity are important factors for the economic viability of a region
- 4 Knowledge of historical landscapes and heritage provides important insights into the functioning of river catchments
- 5 Ecological values are often closely related to the historical land use and water management
- 6 The inclusion of heritage themes increases public support and promotes public participation
- 7 The history and story of a stream contributes to improving water awareness and provides inspiration for (youth) education
- 8 Landscape and heritage features can be a strategic ally for water related objectives
- 9 River landscapes can form a connection between cities and countrysides
- 10 The Dutch environmental law focuses on the landscape, with the aim to promote public participation. It also calls for responsibility and diligence

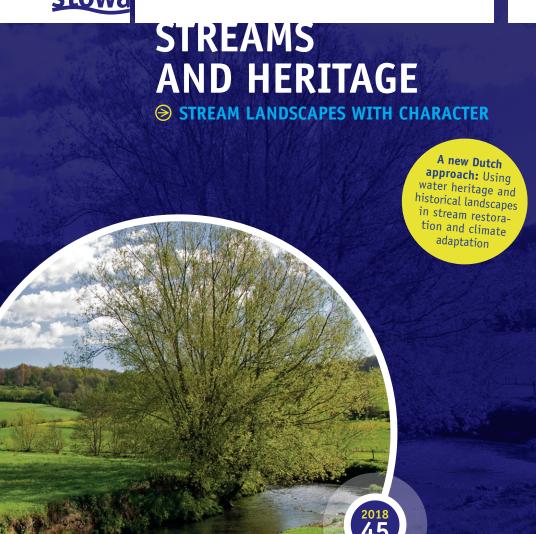
This brochures is a summary of the guidebook "Handboek beken en erfgoed"
© Rijksdienst voor het Cultureel Erfgoed (RCE, the Dutch Cultural Heritage Agency)
& STOWA (the knowledge institute of the Dutch water authorities), Amersfoort, December 2018

Bleumink, H. & J. Neefjes. 2018. Handboek beken en erfgoed. Beeklandschappen met karakter. Bureau Overland, in opdracht van Stichting Toegepast Onderzoek Waterbeheer en de Rijksdienst voor het Cultureel Erfgoed. Publicatienummer 2018-45

For more information visit WWW.CULTUREELERFGOED.NL or WWW.STOWA.NL



stowa







NEW DUTCH GUIDEBOOK PLACES HISTORICAL LAND-SCAPES OF STREAM VALLEYS ON THE WATER AGENDA

Against the setting of the well known polder and dike landscapes in the Netherlands, which are in part under sea level, approximately half of the country consists of slightly elevated sandy landscapes with lowland streams. The stream valleys are predominantely only a few meters lower than their surroundings. They are distinguishable by wetter, sometimes peaty soils, and by grassy pastures and swamp forests. These landscapes are scattered with rich historical resources and heritage such as old castels, watermills and formerly irrigated meadows. Since the early 20th century, many of these stream valley landscapes have been modernized to benefit the agricultural sector. However impacts to the stream basins have been significant. The resulting faster water drainage has lead to downstream flooding as well as the deterioration of nature values and landscapes diversity.

For the past 20 years, the Dutch water authorities have been working on stream restoration projects. Thousands of kilometers of streams have been and will be rehabilitated with consideration for combating drought, water storage,

climate adaptation and nature restoration. The focus in past years has primarily been on water safety and ecology, while little attention has been given to the historical landscape. Therefore in 2018, STOWA and RCE produced a guidebook "Handbook Beken en Erfgoed". The book offers guidelines to combine water- and ecological-goals with the preservation and improvement of historical stream valley landscapes. The historical landscape can not always be restored, but

can, however, be used as a source of inspiration for effective and creative solutions. In this way heritage becomes a driver for new developments. Attention to heritage also has the advantage of strengthening support in the region and improves the landscape and recreational attractiveness of an area.

This brochure provides an outline of the main points detailed in the guidebook.





This timeline gives an overview of the most important landscape forming processes in streams and stream valleys, with their landscape impacts. The emphasis is on the historical times and begins in the prehistoric times. This is approximately 5000 BC, when people began to have more influence on the streams and the landscapes through their agricultural activity. Part C of the guidebook deals extensively on the historical landscape development in the stream valleys.

Historical period	Late prehistoric and Roman times		Middle /	Ages	Middle Ages Late	Early moder	n period		Late modern his	story					
Function group \ Time	-5000 0		450 7	700 10	050 1250	1500	1650	1750	1800	1850	1900	1945	1965	1980	
Prehistoric and Roman land use	Burials, sacrificial gifts, crossings, agricultural use Burial mounds in spatial relation to stream valleys Archaeological remains including graves and sacrificial gif	fts													
Agricultural use and fisheries				Reclama	ation and deforestation outside of the stream va	ley Larger and dee	eper seepage flows, effects or	n discharge and degree of meandering							
					Further reclamation and drainage of the wet	andy covered region	is, swamps and bogs $\mid \begin{array}{c} Ne \\ de_j \end{array}$	w watercourses via the extending of streams, compressions in the landscape, connecting drainage sy	necting estems						
								stream valley Changes in discharge and sedin meandering, changes in incision							
					Reclamation and d	ainage of the stream	n valley Stream valley lar Streams get mor	ndscape covered with meadows (with drainage dito e evident watercourses, in the stream valley there	thes), wooded banks, he is a compression and ox	edgerows, plots of swamp forest xidation of peat, lowering of ground level					
						Fisheries (reg	garding change in the land	scape) fishing ponds/farms in the stream valle	y, small elements that o						
											-				
										Tackling floods by means	of streams and straightening of stream		n the bank of streams, new watercourses, drying out of stream valleys and their sur		
												Land consolidation, intensification	Disappearance of the landscape distinct stream valleys and environment, building	on between 1 in stream valleys	
Agricultural irrigation					Naturally occurrin locally increased i	y agricultural irrigat	ion A portion of draining	ge ditches, (diverted) stream channels and have served for agricultural irrigation		Experiments with modern	ivigation tachniques				
										Systematic systems, drainag	e ditches, embankments				
Transportation			Road tran	nsport adap	oted to stream valleys (Remnants of) ferriage, b										
				Constru	Streams as transpuction of water mills, river diversions to water m			s, weirs in streams, quays, pumping stations, locks tream channel floors,	s, skipper's inns, sailing	heritage					
Watermills, industry and urban functions				Constit	uction of water mitts, fiver diversions to water in			off upstream systems Stream systems with diverted streams, springs, po	nds several mills						
						Industrial ap		s and iron foundries Excavation plots of iron		ron foundry buildinas near naviaable strea	ms				
								vater used as process water and for dumping w							
										se stream odor problems Concealed s	-	shments and buildings on bridges			
												Green wedges in expan	nding cities Attractive city parks and g	reen lungs in cities	
Defense, castles and estates					Castles and castle canals relating to streams	Castles or remnants	s thereof found in or on the	edge of streams, link between water mills and cast	tles, supply streams to c	castle canals					
						Beautifying	estates and country homes	s Aesthetic water, ponds and moats, designed s	treams and cascades						
						Targeted util	lisation of inundations and	water lines "waterlinies" Remnants of inun	dation areas, entrenchn	nents, quays, earthworks and sluices in rel	ation to the streams				
Recreation											Recreation, planned swim	ming opportunities Swimming fa	acilities, bath cabins by the steams, swimr	ning areas in streams, bike paths, co	noe routes through the stream valley lo
Nature											Nature conservation St	Nature conservation Streams and their ecosystems remain preserved on estates and later in designated nature areas			
														Nature develop	nent on former farmlands, stream res ning nature, restored & new meandering